

Department of Community Preservation 24 W Montauk Hwy, Hampton Bays, NY 11946 Ph: 631-287-5720 Fx: 631-728-1920 WWW.SOUTHAMPTONTOWNNY.GOV/CPF

# COMMUNITY PRESERVATION FUND (CPF) WATER QUALITY IMPROVEMENT PROGRAM CHECKLIST/APPLICATION INSTRUCTIONS

The CPF Water Quality Improvement Project Plan (WQIPP) Fund follows the objectives in the adopted <u>Water Quality</u> Improvement Project Plan (see http://www.southamptontownny.gov/DocumentCenter/View/7318)

To apply for funding, an application must be **COMPLETED** and submitted along with detailed narratives and supporting information as described below. The Water Quality Advisory Committee will rank and score projects based on the <u>Scoring Criteria contained in the application materials</u>. Parcel acquisitions will be considered on an ongoing basis, independent of this application process.

A Public Hearing and Town Board Resolution will be required for individual or multiple projects in excess of \$50,000.

# WATER QUALITY IMPROVEMENT PROJECT MEANS:

# [1] DEFINITIONS:

- 1. Wastewater Treatment Improvement Project means the planning, design, construction, acquisition, enlargement, extension, or alteration of a wastewater treatment facility, including alternative systems to a sewage treatment plant or traditional septic system, to treat, neutralize, stabilize, eliminate or partially eliminate sewage or reduce pollutants in treatment facility effluent, including permanent or pilot demonstration wastewater treatment projects, or equipment or furnishings thereof. Stormwater collecting systems and vessel pumpout stations shall also be included within the definition of a wastewater improvement project.
- 2. Nonpoint source abatement and control program projects developed pursuant to section eleven-b of the soil and water conservation districts law, title 14 of article 17 of the environmental conservation law, section 1455b of the federal coastal zone management act, or article forty-two of the executive law;
- 3. Aquatic Habitat Restoration Project means the planning, design, construction, management, maintenance, reconstruction, revitalization, or rejuvenation activities intended to improve waters of the state of ecological significance or any part thereof, including, but not limited to ponds, bogs, wetlands, bays, sounds, streams, rivers, or lakes and shorelines thereof, to support a spawning, nursery, wintering, migratory, nesting, breeding, or foraging environment for fish and wildlife and other biota.
- 4. Pollution Prevention Project means the planning, design, construction, improvement, maintenance or acquisition of facilities, production processes, equipment or buildings owned or operated by municipalities for the reduction, avoidance, or elimination of the use of toxic or hazardous substances or the generation of such substances or pollutants so as to reduce risks to public health or the environment, including changes in production processes or raw materials; such projects shall not include incineration, transfer from one medium of release or discharge to another medium, off-site or out-of-production recycling, end-of-pipe treatment or pollution control.
- 5. The Operation of the Peconic Bay National Estuary Program, as designated by the United States Environmental Protection Agency. Such projects shall have as their purpose the improvement of existing water quality to meet existing specific water quality standards. Projects which have as a purpose to permit or accommodate new growth shall not be included within this definition.



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# COMMUNITY PRESERVATION FUND (CPF) WATER QUALITY IMPROVEMENT PROGRAM PROPOSAL SUMMARY

**Project Applicant:** Mill Pond Association

**Project Title:** Restoration of Mill Pond Water Quality by Reducing Internal Phosphorus

Loading Due to Carp Bioturbation

**Project Manager:** 

Name Steve Abramson (with limnologist, Stephen Souza, Ph.D., Princeton Hydro, LLC)

Title Chair

Organization Mill Pond Association

Address PO Box 488, Water Mill, NY 11976

Phone 631-428-7575

Email stevea@hamptons.com

Property Owner (if different from Project Manager organization):

Name Board of Trustees for the Freeholders and Commonalty of the Town of Southampton

Affiliation Town of Southampton

Mailing Address 116 Hampton Road, Southampton, NY 11968

Phone 631-287-5717

Email EWarner@southamptonny.gov and JDuryea@southamptonny.gov

**Project Location** 

Address Mill Pond, Water Mill

SCTM#(s) 101-03-009.1

Type of	Project	check all	that apply):

**Reduction** 

**X** Remediation

**Restoration** 

## **Project Summary:**

Phosphorus released from sediments due to carp bioturbation is the documented primary source of



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Mill Pond's Phos loading. Remove carp and install floating constructed wetlands to reduce Phos loading, thus decreasing the occurrence of cyanobacteria blooms that impair Mill Pond's water quality.

1.	Must meet at least one of the definitions of "Water Quality Improvement Project" per State Law Chapter 551 cited above. Check all that apply.
	Wastewater Treatment Improvement Project Non-point source abatement and control Aquatic habitat restoration Pollution prevention Stormwater collecting system Vessel Pump out station Operation of Peconic Bay National Estuary Program (Grant Match)
2.	PRIORITY AREA(S) Priority areas are defined in the Water Quality Improvement Project Plan (WQIPP).
	High 303(d) Impaired Medium Outside High and Medium priority areas*
	*If Outside High and Medium priority areas, explain how the project is relevant to WQIPP goals.
	Add text (limit 500 characters)

### 3. PROJECT DESCRIPTION

3a. Existing conditions of applicable groundwater/sub-watershed/waterbody and most recent and relevant data available (provide sources). Identify Pollutant(s) of Concern (POC).

Mill Pond's existing conditions and causes for intense cyanobacteria blooms detailed in 2018 report by Princeton Hydro: "A Comprehensive Limnological Assessment of Mill Pond, Southampton, New York," 2018. POC's primarily Phosphorus and secondariy Nitrogen.

3b. How the proposed solution addresses the issue in the context of Reduction, Remediation and/or Restoration as per the CPF Water Quality Project Plan. Note all remediation and restoration projects



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### must assure that reduction measures are also addressed.

Project focuses on the removal of carp, documented to be the primary source of Mill Pond's P load. This will reduce the resuspension of sediment P and pond P concentrations. Floating Constructed Wetlands (FCWs) absorb water column dissolved P, mitigate turbidity and provide fish habitat.

3c. Describe the proposed technology and its demonstrated efficacy in similar settings. May include published data.

FCWs listed in CPF WQIP for P removal (p. 91). Carp removal effectiveness — Carp Solutions NALM 2018 Symposium; https://priorlakeassociation.org and https://www.minnehahacreek.org. Refer to attached 2018 Princeton Hydro report.

3d. How the project supports Town of Southampton, Suffolk County, NYSDEC, Long Island Nitrogen Action Plan (LINAP) or other adopted goals/policies (provide references with pages numbers).

See P.6 of the supplemental text (Executive Summary): "Consistency of Proposed Project with Southampton CPF WQIPP, NYSDEC HABs Initiative and the LINAP"

3e. Review the following statements and indicate whether they are applicable to your project. For all "Yes" responses, please indicate how your project addresses the requirements indicated.

Yes	N/A	If stormwater system or drainage is proposed: The project must indicate compliance with the New York State Stormwater Design Manual (2015 and as updated).
		If project is related to farmland: Describe any Agricultural Stewardship Plan or other long term strategy for Nitrogen abatement.
		If the project is for habitat restoration: The narrative must address how underlying causes are being ameliorated and expected outcomes for local species populations or other ecological considerations are given.
		If project is a Sewage Treatment Plant (STP) or cluster treatment system: Fund allocation request is based on cost for reduction of pre-existing



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conditions and not for purpose of accommodating new density (describe preexisting density and associated flow (gallons per day) and total projected nitrogen reduction in narrative). Include detailed information on how many homes the system would treat as well as potential for formation of Sewer District, if required by Suffolk County Health Department or Town Law.

If the project is requesting grant match for the Peconic Estuary Program:
Include information related to funding program source and purpose of
application and any relevant items on this checklist. Note: A Town Board
resolution will be required in order to encumber matching funds for grant
applications.

### 4. WATER QUALITY BENEFIT

4a. Identify Nitrogen, Pathogen or Pollutant of Concern (POC) including Existing Condition and Target Reduction.

Phosphorus is primary POC. Carp removal and installation of FCWs will reduce P loading resulting in reduction in cyanobacteria blooms. Reduction in density of carp will facilitate reestablishment of littoral vegetation..benefiting fishery, further stabilizing sediment and further attenuating N and P.

4b. Describe plans for collecting and reporting on water quality over time.

Mill Pond water quality documented via CSLAP sampling and detailed 2018 Princeton Hydro study. A sampling program similar to 2018 program will be conducted in 2019 and 2020 to document water quality improvements attributable to this project. Details provided in Executive Summary.

4c. Indicate useful life of proposed technology (must meet or exceed five years).

Carp removal is a holistic, ecological based water quality improvement measure consistent with Mill Pond long-term restoration plan. FCWs have 20 yr life-span as per p.91 of WQIPP.

### 5. COST FACTORS

5a. Explain how you have confirmed that the proposed budget is reasonable, appropriate and necessary. If available, provide third party estimates or other documentation of how costs were determined.



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DEC required pre-carp removal fish study. FCW purchase, planting & installation, and project WQ monitoring costs developed by Princeton Hydro. Carp removal costs developed by Carp Solutions and Princeton Hydro. Refer to Executive Summary.

5b. Describe any matching funds to be provided.

5c. Explain: i. Why project cannot proceed and intended benefits cannot be achieved without external funding. ii. if funds are awarded at a lower level than requested, or if there are cost overruns, explain how the project will proceed.

- 1. Mill Pond Association (MPA) does not have the ability to raise the funds needed to conduct this project;
- 2. Project will be fixed fee and thus no over-runs anticipated or allowed. If less than requested funds are provided, project can be reduced to 1 yr. of carp removal rather than 2 and associated WQ monitoring reduced from 2 yrs. to 1 yr. Also the proposed FCWs can be reduced from 2 to 1.

# 6. MANAGEMENT, EXPERIENCE, ABILITY

6a. Describe applicant's experience in completing similar projects.

MPA will work with Princeton Hydro (PH). PH has conducted numerous fish removal and/or lake restoration projects in NY, NJ, PA and New England. The effectiveness of PH restoration projects reflected in awards from USEPA, NALMS and NYSFOLA.

6b. Describe community support or opposition to project. If there is opposition, explain how this is to be addressed.

The Mill Pond community has attempted over the past decade to resolve the causes of the pond's cyanobacteria blooms. MPA has community support to reduce P loading, reduce carp and minimize HABs that impact WQ recreation and aesthetics and impact on WQ of Mecox Bay.

6c. Describe any permits needed and time frame/status of approvals. If permits are approved, indicate same.

NYSDEC Fishery Fish Permit required for carp removal. Permit application will be submitted upon grant approval. Carp are non-native, invasive species and their removal supported by NYSDEC. Carp are primary source of Mill Pond's P load. Anticipate quick NYSDEC approval of permit.



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## 7. MAINTENANCE, MONITORING, EVALUATION

Estimate ongoing maintenance costs and explain how these will be supported. Explain stewardship and monitoring activities planned for ensuring sustainability of the project.

Refer to Executive Summary. No maintenance costs for carp removal, minimum costs for maintenance of FCWs. MPA has long history of stewardship, public support, public engagement and outreach.

### 8. DURATION OF PROJECT

8a. Provide a projected project timeline.

Project will be initiated in summer, 2019. Other than NYSDEC fish removal permit, no other impediments to project implementation.

8b. If project is multi-year or phased, provide a breakdown of budget and milestones for each year and phase.

2019 — Phase 1a — Spring/early Summer '19 conduct pre-carp removal fish survey. Summer '19 first round of carp removal. Phase 1b — Summer '19 install and plant FCWs.

2020 — Phase 2 — Conduct second round of carp removal. WQ monitoring to generate metrics used to measure success achieved in '19 and '20.

### 9. ATTESTATION



Check box to certify that funds will not be directed for projects for the purpose of accommodating new growth. Allocation of CPF funds will not be for the purpose of accommodating new growth, as this is prohibited by State law.

### 10. REQUIRED ATTACHMENTS

Confirm that the following required	i documents are attached	to this application
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$\boxtimes$	Photos of existing conditions
	Location Map
$\square$	0

State Environmental Quality Review Act (SEQRA) Long or Short Environmental Assessment Form (EAF) (https://www.dec.ny.gov/permits/6191.html)

Completed EPA Spreadsheet Tool for Evaluating Pollutant Load (STEPL) <a href="http://it.tetratech-ffx.com/steplweb/">http://it.tetratech-ffx.com/steplweb/</a> or similar standardized methodology (describe)



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Project budget (see attached template)

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Ownership commitment is provided via letter of intent (LOI) for non-municipal owners or municipal resolution for municipal owners

## 11. OTHER ATTACHMENTS

List other attachments provided, including cost estimates, bids, plans, documentation of matching funds, and other as appropriate to demonstrate project readiness, quality, feasibility, and cost effectiveness.

- 1) Proposal for 2019 WQIPP Grant Funding (Executive Summary);
- 2) "A Comprehensive Limnological Assessment of Mill Pond, Southampton, New York," 2018, Princeton Hydro.